

<sup>45</sup>  
~~74~~. (New) The invention as set forth in claim <sup>24</sup>~~53~~ above,  
further comprising means for accepting deletions in the  
mathematical expressions traced by the pointing element on the  
electronic input surface.

<sup>46</sup>  
~~75~~. (New) The invention as set forth in claim <sup>24</sup>~~53~~ above,  
further comprising means for accepting erasures in the  
mathematical expressions traced by the pointing element on the  
electronic input surface.

REMARKS

In response to the Office Action of August 17, 1994, claims 1, 2, 5, 6, and 30-52 have been cancelled, claims 3, 16, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, and 29 have been amended, and new claims 53-75 have been added. Claims 3, 8-29, and 53-75 are in the case. Re-examination and reconsideration of the application, as amended, is requested.

Record is made of telephone interviews between the Examiner and the below-signed attorney, which interviews took place on September 8, 1994, September 28, 1994, and October 5, 1994. The prior art references and proposed claim amendments were discussed during the interviews, finally resulting in a tentative agreement on allowable claims as presented in this response. The Examiner stated during the interviews that the application would be allowable if claims 1 and 2 were cancelled and claims 3 and 17

combined. The Applicant has complied with these suggestions as indicated herein.

In the Office Action, claim 1 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite because there is not structural relationship between the means for performing calculations and the means for displaying the results.

The Applicant has cancelled claim 1.

In the Office Action, claims 1-25 were rejected under 35 U.S.C. § 103 as being obvious over Inagaki in view of Tan.

The Applicant respectfully traverses these rejections in light of the amended claim 3 (which has been amended to incorporate claim 17) and new claim 53 (which is an apparatus counterpart to the method of claim 3). The Applicant submits that his invention includes novel features not shown by the cited references.

The Applicant's invention comprises a calculator that recognizes handwritten input, wherein the calculator has a electronic input surface and an electronic monitor. The user writes a calculation on electronic input surface as if it were a piece of scratch paper. The calculator records the movements of a pointing element on the surface, recognizes the recorded movements of the pointing element as characters, converts the characters into a first mathematical expression comprised of operands and operators, displays the first mathematical expression on the electronic monitor, performs calculations indicated by the first mathematical expression, and then displays

the result of the performed calculations on the electronic monitor. In addition, the first mathematical expression is logically linked to a second mathematical expression inscribed on the electronic input surface.

Inagaki discloses a calculator using a key array for recognizing handwriting input. A user runs his finger over the key array in the form of a symbol, and the calculator recognizes the symbol and enters it as if the corresponding button was pressed. However, there is no way for Inagaki to logically link mathematical expressions together.

Tan discloses a keyless electronic calculating pen comprising a portable combination of the pen and an electronic calculator. The pen dispenses ink as the user writes the calculation on paper. The calculator recognizes the symbols written by the user based on the movements of the pen and then the calculator enters them into a memory for calculation. However, there is no way for Tan to logically link mathematical expressions together.

Since independent claims 3 and 53 of the present application recite features which are not present in either reference, the Applicant submits that the independent claims, and hence all the dependent claims, recite novel physical features which patentably distinguish over any and all references under 35 U.S.C §§ 102 and 103. In addition, the Applicant submits that the dependent claims by themselves also recite novel physical features which

patentably distinguish over any and all references under 35 U.S.C §§ 102 and 103.

In view of the above, it is respectfully submitted that the claims as amended are in immediate condition for allowance. Reconsideration of this application and its early allowance are requested.



Respectfully submitted,

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By his attorneys,

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Dated: Nov. 14, 1994

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